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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/932,883	08/20/2001	Shivendra Kumar Goyal	NOVA 9227	6770

7580

06/16/2004

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EXAMINER

CHOI, LING SIU

ART UNIT	PAPER NUMBER
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1713

DATE MAILED: 06/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/932,883

Applicant(s)

GOYAL ET AL.

Examiner

Ling-Siu Choi

Art Unit

1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 23 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This Office action is in response to the Amendment filed April 23, 2004. Claims 1-58 are now pending. In view of the Amendment, claim objections and claim rejections of 30-58 under 35 USC 103 (a) are moved. And claim rejections of 1-29 under 35 USC 102(b) are sustained.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

**A person shall be entitled to a patent unless --
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.**

3. Claims 1-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Berardi et al. (EP 0 595 574 B1).

The present invention relates to

the improvement of controlling the feed of a aluminum-containing cocatalyst to the reactor
to provide **10-50 ppm of aluminum from the cocatalyst based on the polymer production rate**

provided	the molar ratio of total Al (catalyst + cocatalyst) / Ti (supported Ziegler-Natta catalyst) ≥ 25
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in a gas phase polymerization of ethylene and 0-20 weight % of one or more comonomers
in the presence of the catalyst comprising the cocatalyst selected from the group consisting of tri-C₂₋₆ alkyl aluminum, alkyl aluminum halide and mixtures thereof.

(summary of claim 1)

The rejection is adequately set forth in paragraph 4 of the previous Office Action and is incorporated herein by reference.

Response to Applicants' Argument

4. Applicants' arguments filed on April 23, 2004 have been fully considered but they are not persuasive.

Referring to the focal argument "in example 12(b) the ratio of Al from the catalyst and co-catalyst to Ti is 12:6 (12 **millimoles** of TEAL and 3 **moles** of titanium tetra-nbutoxide and 3 **moles** of TiCl₄ in the catalyst per se and a ratio of Al:Ti of 35: 0.33 in the reactor.....Al:Ti in example 12(b) is 47:6.33 or about 9:1. This is not close or even slightly lower than the requirement of the claims presently under consideration", Al/Ti in the catalyst per se is not 12:6 because the amount of Al in millimole and the amount

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of Ti in mole. Thus, Al:Ti should be 0.012: 6. Assuming Al:Ti were 12:6, the Al:Ti would not become 47:6.33 because there is no mathematical base to do so [$(12+35) : (6+0.33)$] due to these two ratio belong to two different systems. In view of the example 12(b), Al:Ti should be $35/0.33 = 106$. Thus, rejection of claims 1-29 are sustained.

Conclusion

5. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ling-Siu Choi whose telephone number is 571-272-1098.

If attempt to reach the examiner by telephone are unsuccessful, the examiner's

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supervisor, David Wu, can be reach on 571-272-1114.

Ling -Siu Choi

Ling -Siu Choi

June 10, 2004